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AUTHOR McCarney, Stephen B.; Anderson, Paul D.
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ABSTRACT

This school-version technical manual provides an overview of the "Transition Behavior Scale-Second Edition School Version" (TBS-2 SV), an assessment that was developed to be a direct observation screening measure of behavior characteristics most predictive of behavior in society in general and employment specifically. Those students (ages 12-18) most likely to have problems in employment and society may then be identified for additional preparation, further assistance, or special consideration. The TBS-2 SV includes 62 items representing behavioral characteristics where educational personnel can provide their professional input regarding student skills. The areas evaluated by the scale (work related, interpersonal relations, and social/community expectations) are those areas which evidence indicates relates most directly to success in employment and societal transition. The test is designed to be completed in approximately 15 to 20 minutes. The manual describes characteristics of the test, uses of the test, instructional and intervention activities for transition planning, reliability and validity of the test, administration and scoring, and interpreting results of the tests. Appendices include information for converting raw score to subscale standard score and subscale percentile score. (Contains 42 references.) (CR)

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TRANSITION BEHAVIOR SCALE

SECOND EDITION

School Version Technical Manual

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TRANSITION BEHAVIOR SCALE SECOND EDITION

SCHOOL VERSION

Stephen B. McCarney
Paul D. Anderson

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Educational Services, Inc.
800 Gray Oak Drive
Columbia, MO 65201
Telephone: (573) 874-1710
FAX: (800) 442-9509

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Chapter One

Rationale and Overview

There is no doubt that behavior is the single most important factor related to success in society. The most basic requirement for social and employment success is that an individual behaves in a way that is acceptable or, at the very least, not unacceptable to those in the immediate environment. As a handicap, inappropriate behavior has the potential to be the most debilitating. Regardless of any handicap and regardless of skills attained, inappropriate behavior will cost the individual his or her group membership and, most profoundly, his or her employment. You can be deaf, blind, learning disabled, mentally retarded, etc. and maintain employment in spite of your handicap; but when you engage in inappropriate behavior related to social situations and job responsibility, social freedom and employment will likely be lost or terminated.

It is well documented (Clarizio & McCoy, 1983) that students with identifiable learning and behavior problems in school tend to exhibit the same behavior problems in employment, military service, and other situations outside of school. Roff (1961) found that reliable group predictions of employment and military adjustment could be made on the basis of earlier social adjustment in school. In fact, adult antisocial behavior virtually requires the kind of antisocial behavior exhibited by youth which can be observed and documented in the school environment (Robins, 1978). The severity and number of symptoms of inappropriate behavior observed in school is the best indicator of problems in later life (MacFarlane, Allen, & Honzik, 1954; Robins, 1978).

It has been found, in particular, that students with antisocial and acting out behaviors are those most likely to have adjustment and behavior problems after school (Robins, 1978). Well documented and extensively reported research exists to indicate that school and pre-employment behavior is predictive of employment and military behavior (Roff, 1956; 1957; 1960; 1961). More specifically, students with learning and behavior problems in school are the most likely to have adjustment and behavior problems in employment and military service, as well as performance problems in situations such as stress and combat (Beebe & Appel, 1958). Roff (1961) specifically found that students who were aggressive toward others and had interpersonal difficulties commonly had bad conduct records in military service and later problems with societal transition. Conversely, students whose behavior is most appropriate tend to have the best self-control and self-discipline and are most successful in employment and military service.

In employment, behavior problems are extremely costly in terms of loss of productivity, property damaged, other personnel affected, disciplinary actions, and confining or discharging personnel. The success of transition could be greatly enhanced with behavioral screening which would result in reduced personnel problems during employment and related interpersonal activities.

The need for an organized approach to transition of the handicapped population into employment and independent living has been documented in follow-up studies (Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985). There is little doubt that even mildly disabled individuals need more support and careful preparation for transition than the time-limited services of a work-study coordinator or vocational rehabilitation counselor (Will, 1984).

Transition

Transition from school to adult life is one of the most crucial processes for high school students. The ability of a student to make a successful and productive change into an adult role after finishing high school is critically important. The focus of special education programming has shifted to a stronger emphasis on transition planning. A large reason for this emphasis is the poor adjustment to adult roles of students who had received special education services (Kortering & Edgar, 1988; Scuccimarra & Speece, 1990; Blackorby & Wagner, 1996). Transition is intended to be an individualized and ongoing approach to help students assume their adult roles. For the process to work, individuals with disabilities and their families must be actively engaged in this planning. Clark (1998) reported that the *Individuals with Disabilities Education Act Amendments of 1997* (IDEA 97) support the use of tests, interviews, direct observations, and curriculum based assessments as part of transition planning. Individual planning should be facilitated through assessment, parent and student participation, and Individualized Educational Plan (IEP) development (Clark, 1996). The *Transition Behavior Scale-Second Edition School Version* (**TBS-2 SV**) was designed to be a screening measure of behavioral characteristics most likely to predict success in employment and societal transition.

Halpern (1994) delineated the following definition of transition:

Transition refers to change in status from behaving primarily as a student to assuming emergent roles in the community. These roles include employment, participating in post-secondary education, maintaining a home, becoming actively involved in the community and experiencing satisfactory personal and social relationships. The process of enhancing transition involves the participation and coordination of school programs, adult agency services and natural supports within the community. The foundation for transition should be laid during the elementary and middle school years, guided by the broad concept of career development. Transition planning should begin no later than age 14, and students should be encouraged, to the full extent of their capabilities, to assume a maximum amount of responsibility for such planning (p. 117).

Introduction of the *Transition Behavior Scale-Second Edition School Version*

The behavior demonstrated by an individual over time is likely to be the best predictor of future performance (Roff, 1961). The *Transition Behavior Scale-Second Edition School Version* provides the means by which student behavior, which is predictive of employment and societal transition behavior, can be documented. Those students most likely to have problems in employment and society may then be identified for additional preparation, further assistance, or special consideration. Those students most likely to be successful can, by the same means, also be easily identified and the **TBS-2 SV** results can be used to promote the young man or woman into housing, employment, community programs, etc.

The **TBS-2 SV** was developed to be a direct observation screening measure of behavioral characteristics most predictive of behavior in society in general and employment specifically. Students who have well developed self-control and discipline tend to be successful in post-school outcomes (e.g., 4 year college, 2 year college, vocational training, assisted living, etc.). Areas of concern can be identified and that information can be used as part of the individualized transition planning. Personal competence, daily and community living skills/activities, social skills/interaction, work performance, and work experience are variables which predict post-school success for high school level special education students (Heal & Rusch, 1995; Lakin, Bruininks, Chen, Hill, & Anderson, 1993). There has been a three-pronged approach to post-school outcomes for individuals with disabilities: independent living, personal-social adjustment, and occupational adjustment (Clark, 1996).

Behavioral screening can assist with the identification of potential barriers to post-school success. The information gathered can be used in transition planning and the development of IEP goals and objectives. Having a transition plan in place has been shown to be significantly related to higher levels of satisfaction among students and parents (Oh & Onaga, 1999). The IEP can be used as the instrument for helping students plan, learn, address self-advocacy skills, and assume responsibility for their future transition to working and independent living (Hanley-Maxwell & Collet-Klingenberg, 1995).

Legislative mandates, research articles, and best professional practice support an organized approach to transition planning. The **TBS-2 SV** can serve as one way to document and assess school personnel input for transition planning. The identification of needs for remediation prior to departing school can support the successful post high-school adjustment for students with disabilities.

Careful assessment of student readiness for transition in a systematic fashion would greatly reduce the adjustment problems which are often encountered in major areas of concern such as employment. Neubert, Tilson, and Ianacone (1989) reported that of 66 mildly disabled individuals participating in a post-secondary transition program of competitive employment, 74% experienced job-related difficulties; 92% of these problems were task related, 71% were work-adjustment, and 12% were health. As Neubert, Tilson, and Ianacone further explained:

> Task related difficulties encompassed inability to perform assigned job tasks, inadequate production rate, and difficulty following directions. The work-adjustment category included (a) work related adjustment problems, such as attendance and punctuality; (b) personal adjustment problems (e.g., hygiene and grooming); and (c) social and interpersonal adjustment problems (p. 496).

It is important to reiterate that, in addition to screening those persons most likely to have behavior problems in employment and societal transition, the **TBS-2 SV** provides the means to identify those persons who are likely to be the most responsible, dependable, stable, conscientious, etc. In this manner, not only are the individuals most likely to have problems screened, but those individuals who are most likely to be successful can be aggressively supported in terms of vocational placement, housing, and all areas of independent living. Additional training, preparation, and support can then be made available for the student in order to reduce the likelihood of failure in future employment and independent living.

The **TBS-2 SV** was developed to provide a standardized approach to the collection of school personnel input for transition planning. It will not provide all the information needed for school personnel input; but it can be an important part of school personnel input and transition planning. The **TBS-2 SV** can be one compo-

nent of comprehensive transition planning.

It is important to reiterate that, in addition to screening those persons most likely to have behavior problems in employment and societal transition, the **TBS-2 SV** provides the means to identify those persons who are likely to be the most responsible, dependable, stable, conscientious, etc. In this manner, not only are the individuals most likely to have problems screened, but those individuals who are most likely to be successful can be aggressively supported in terms of vocational placement, housing, and all areas of independent living. Additional training, preparation, and support can then be made available for the student in order to reduce the likelihood of failure in future employment and independent living.

Characteristics of the *Transition Behavior Scale-Second Edition School Version*

- Includes 62 items representing behavioral characteristics where educational personnel can provide their professional input regarding student skills.
- The 62 **TBS-2 SV** items were developed according to the recommendations of educational diagnosticians, guidance counselors, educational personnel, and employers.
- The areas evaluated by the scale (work related, interpersonal relations, and social/community expectations) are those areas which evidence indicates relate most directly to success in employment and societal transition.
- Designed to be a direct observation measure of performance in those areas most likely to predict success in employment and societal adjustment.
- Standardized on 2,624 students, ages 12 to 18 years old.
- Standardization sample adequately represented ethnic groups and included 1,328 males and 1,296 females.
- Completed in approximately 15 to 20 minutes.
- Standard scores, percentile scores, and quotient scores are provided by age and gender.
- Internal consistency, item and factor analysis, standard error of measurement, and test-retest reliability are reported for the **TBS-2 SV**.
- Content, criterion-related, and construct validity data are reported.
- All three subscales, individually and together, provide a measure of behavioral characteristics most likely to predict success in employment and societal transition.
- The *Transition Behavior Scale IEP and Intervention Manual* (McCarney, 1995) was developed to accompany the **TBS-2 SV** and can be used to develop goals, objectives, and interventions for transition planning.

Uses of the *Transition Behavior Scale Second Edition School Version*

The **TBS-2 SV** serves to help school personnel objectively report their observations related to possible post-school success. The scale can help

- identify desirable social transition and work-related behavior,
- document school personnel's observations,
- compare an individual student to a nationwide standard for screening purposes,
- identify areas of concern associated with success in employment and societal transition to be used in transition planning,
- develop goals, objectives, and intervention strategies to help the student transition to employment and independent living, and
- provide a means of screening those persons whose behavior would indicate a need for improvement before transition activities can predictably be successful.

Instructional and Intervention Activities for Transition Planning

Far too often the specific skills, abilities, or behaviors which contribute to transition planning are not translated into areas of program emphasis. The areas of performance on the **TBS-2 SV** are all educationally-relevant and therefore can serve as a guide for the development of transition program priorities. Once strengths and weaknesses are identified, the **TBS-2 SV** can enable the development of individualized transition planning strategies. One of the primary purposes in developing the **TBS-2 SV** was to identify appropriate goals, objectives, and learning experiences for transition planning based upon school personnel input.

Chapter Two

Reliability and Validity

This section of the manual includes the methods used to develop the **TBS-2 SV** and the technical and statistical aspects of the instrument. Areas covered in this chapter are

- development of items,
- standardization procedures,
- demographic characteristics,
- standardization data,
- analysis of the **TBS-2 SV** for standardization purposes,
- principal components analysis of the **TBS-2 SV**,
- principal components analysis of each subscale,
- item analysis of the **TBS-2 SV**,
- analysis of response distributions,
- item/total score correlations,
- reliability, and
- validity.

Development of Items

The **TBS-2 SV** was developed to be an educationally-relevant measure of predicted success in employment and independent living based upon school personnel's observations of a student's behavior or skills. The **TBS-2 SV** is a restandardization of the original *Transition Behavior Scale* (McCarney, 1989).

Over a three-month period from October 1986 to December 1986, a total of 47 educational diagnosticians, guidance counselors, educational personnel, and employers responded to the request to supply a list of those indicators which are most commonly found to predict success in employment situations and transition to society/independent living. In response, literally hundreds of possible versions and combinations of indicators of behavior were received from the respondents. Following the collection of the responses, an item pool of the 83 most representative indicators was created by collapsing and combining all items which represented a single indicator and eliminating any suggestions which were extreme or uncommon to represent typical predictors of success.

These items were then returned to the original respondents and they were asked to conduct the following activity: (a) eliminate any of the 83 items they believed were inappropriate for a representation of behavior, (b) modify or reword any items which could be stated in a clearer or more useful manner for school personnel/employers, and (c) add any new items which they felt would assist in the evaluation of behavior.

Forty-two educational diagnosticians, guidance counselors, educators, and employers responded to the request to further consider the item pool for the instrument. As a result of their meticulous treatment of the indicators supplied to them, the respondents made it possible to eliminate or combine several items from the original pool in order to create a new list of 62 behavioral predictors of success. The importance of this process must be considered in recognizing that the final group of 42 educational diagnosticians, guidance counselors, educational personnel, and employers who had professional decision-making responsibilities for identifying students likely to be successful, supplied the information necessary for the creation of the final list of the most relevant predictors of success in employment and society.

Having completed the item selection process, each of the 62 items was assigned, on the basis of face validity, to one of the three subscales (i.e., *Work Related, Interpersonal Relations, and Social Community Expectations*) identified in the theoretical construct of the scale. This version of the scale was field tested in 11 Missouri school districts by 110 high school classroom teachers. The 11 districts represented a wide range of demographic variables representing student populations from 600 to 14,000 students. The communities ranged from rural with less than 3,000 residents to communities of 100,000 residents in the St. Louis metropolitan area. Teachers, randomly selected from grade level 12, were asked to randomly select four students from their classes to be rated with the scale. All teachers were instructed in the same manner to make certain that they did not include or exclude any students for any reason. Results of the field testing activity were used to verify that the 62 items on the scale were significantly appropriate and should be retained on the scale.

Standardization Procedures

Once items for the **TBS-2 SV** were determined to be ready for the standardization process, randomly-selected school systems, from the major geographic regions of the United States were contacted to solicit participation in the standardization of the **TBS-2 SV**. The school systems were selected at random from a national mailing list obtained from a commercial mailing supplier. In all, 30 school systems participated in the standardization process.

Those school systems that agreed to participate were asked to randomly select teachers at grade levels 7 through 12 to rate students for the standardization process. The teachers randomly selected and rated students from their classrooms with specific instructions not to include or exclude any student for any reason from their ratings. In addition, school systems were asked to help complete reliability and validity studies.

When the rating forms were returned from the participating school systems, each form was checked for demographic information and degree of completion. No rating form with less than 90 percent of the information completed was used in the standardization process.

TABLE 1

DISTRIBUTION OF STUDENTS IN THE SAMPLE ACCORDING TO AGE AND GENDER

Age Level		Number in Sample
Females		
12 years		153
13 years		275
14 years		219
15 years		197
16 years		208
17 years		202
18 years		42
	Total	1,296
Males		
12 years		127
13 years		208
14 years		239
15 years		224
16 years		228
17 years		217
18 years		85
	Total	1,328
Total Sample		
12 years		280
13 years		483
14 years		458
15 years		421
16 years		436
17 years		419
18 years		127
	Total	2,624

Demographic Characteristics of the Sample

During the period of November, 1997 through January, 1999, the standardization of the **TBS-2 SV** was completed. In all, the standardization sample for the **TBS-2 SV** included 2,624 students from 20 states (30 school systems) representing the four major geographic regions of the United States (U.S. Bureau of the Census, 1998). The states involved were Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Louisiana, Michigan, Missouri, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Utah, and Wyoming. Table 1 shows the distribution by age and gender of the students involved in the standardization. Table 2 represents the demographic characteristics of the standardization sample as compared to the nation (U.S. Bureau of the Census, 1998).

TABLE 2

DEMOGRAPHIC CHARACTERISTICS OF THE STANDARDIZATION SAMPLE

	Percent of Sample	Percent of Nation
Gender		
Male	50.7	49.0
Female	49.3	51.0
Ethnicity		
White	78.6	72.4
African American	12.1	12.1
Hispanic Origin	6.3	11.2
Asian or Pacific Islander	1.7	3.6
American Indian, Eskimo, Aleut	1.3	0.7
Residence		
Urban/Suburban	53.3	75.2
Rural	46.7	24.8
Geographic Area		
Northeast	16.2	19.3
Midwest	24.6	23.3
South	36.8	35.2
West	22.4	22.2
Mother's Occupation		
Professional/Managerial	22.3	30.3
Sales/Clerical/Technician	23.2	41.3
Service Worker	15.3	17.4
Farm Worker	3.2	1.2
Other	36.1	9.8
Father's Occupation		
Professional/Managerial	24.5	27.5
Sales/Clerical/Technician	23.5	19.8
Service Worker	17.7	10.2
Farm Worker	9.6	7.2
Other	24.7	35.3

Standardization Data

The standardization data were analyzed by age and gender of the students. Significant differences were found by gender and age on the subscales and quotient scores. Due to these significant differences, six standardization groups were developed:

- Females, 12 through 13 years,
- Females, 14 years,
- Females, 15 through 16 years,
- Females, 17 through 18 years,
- Males, 12 through 15 years, and
- Males, 16 through 18 years.

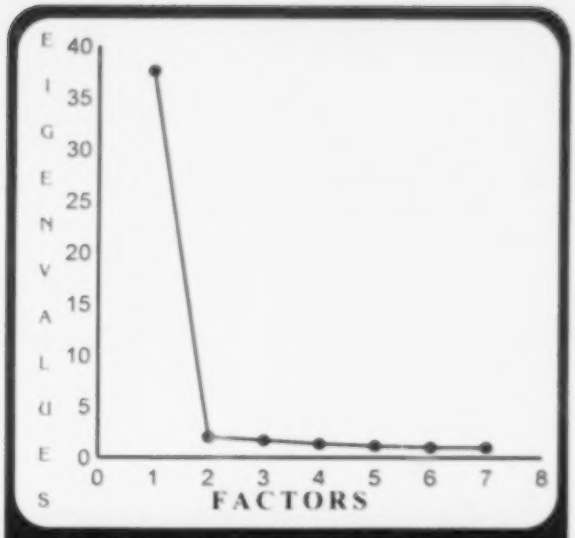
Analysis of the *Transition Behavior Scale-Second Edition School Version* for Standardization Purposes

Four analyses were performed on the **TBS-2 SV** ratings of 2,624 students:

- a principal components analysis with varimax rotation of the inter-item correlations for the entire instrument,
- a principal components analysis of each of the logically defined subscales,
- an item analysis of each logically defined subscale, and
- an internal consistency reliability analysis of each logically defined subscale.

The results of these analyses are generalizable to the extent that the sample is representative of the population to which the instrument will be administered in the future. Since the **TBS-2 SV** standardization represented the major geographic regions of the United States and approximates the demographic characteristics of the nation, it is appropriate to conclude that the results are accurate.

Factor analysis is a mathematical procedure used to identify the minimum number of traits, abilities, or factors that account for test variance (Sax, 1989). Additionally, factor analytic studies are the most frequently employed techniques used to document construct validity. By examining the manner in which the various subscale areas load on the same factor, inferences can be made concerning the nature of the construct being measured (Brown, 1970). A varimax rotated factor analysis (Nie, Bent, & Hull, 1975) was generated for the **TBS-2 SV** subscales. Ideally, each subscale should correlate with one factor but not with others. The principal factor method is a factor analytic method that locates one axis so that it defines a factor which accounts for the maximum possible variance of the correlation matrix and locates another axis that accounts for the maximum possible amount of the remaining variance (Sattler, 1992).



TRANSITION BEHAVIOR SCALE-SECOND EDITION
SCHOOL VERSION
SCREE PLOT
FIGURE 1

Principal Components Analysis of the *Transition Behavior Scale-Second Edition School Version*

The principal components analysis of the **TBS-2 SV** resulted in five factors with eigenvalues greater than 1.0. Figure 1 shows the scree plot (Cattell, 1966) for the instrument. This plot shows that the instrument has a very dominant first factor. The first eigenvalue was 37.58 which explained 60.62% of the total variance; the second eigenvalue was 2.00 which explained 3.2% of the total variance; the third eigenvalue was 1.65 which explained 2.7% of the total variance, the fourth eigenvalue was 1.33 which explained 2.1% of the total variance; and the fifth eigenvalue was 1.12 which explained 1.8% of the total variance. It could be argued that there is a single factor which is sufficient to explain the majority of the total variance. Three factors were rotated to the varimax criterion due to theoretical scale construction and comparative purposes.

Table 3 lists all factor loadings of .30 or greater. Questions were presented in the order of the logically defined subscales and Table 3 provides a comparison between these subscales and the statistically derived factors.

The three subscales break down into two factors based upon factor loadings. The most distinct subscale is *Work Related* which has 21 items loading on Factor II and three items with primary crossloading on Factor III. The other two subscales essentially load on the same factor, Factor I. The *Interpersonal Relations* subscale contains 15 items with primary loadings on Factor I, one item with a primary loading on Factor II, and one item with a primary loading on Factor III. The *Social Community* subscale has 19 items loading on Factor I and three items with primary loadings on Factor II.

TABLE 3
FACTOR LOADINGS ON EACH SUBSCALE

Item	Factor I	Factor II	Factor III
Work Related			
1	.41	.69	
2	.43	.69	
3	.36	.78	
4	.36	.74	
5	.37	.78	
6	.49	.60	.34
7		.51	.59
8		.55	.57
9	.37	.53	
10	.31	.48	.59
11	.49	.62	
12	.40	.72	
13	.47	.63	.33
14	.50	.53	
15	.44	.62	
16	.44	.59	.40
17	.32	.71	.35
18	.39	.65	.34
19		.58	.56
20		.58	.55
21	.39	.64	.34
22	.42	.66	.37
23	.32	.67	.44
24	.46	.56	.42
25		.44	.73
Interpersonal Relations			
26	.62	.42	.34
27	.59	.37	
28	.68	.33	
29	.58	.47	.36
30			.70
31	.47	.48	.36
32	.64	.40	.32
33	.36		
34	.65	.41	.39
35	.59		.57
36	.54		.61
37	.58	.40	.40
38	.56	.41	.36
39	.63	.47	.37
40	.65	.31	.32
Social Community Expectations			
41	.67	.39	
42	.71	.30	
43	.69	.41	
44	.60	.47	.33
45	.60		.53
46	.41	.35	.63
47	.54	.45	.38
48	.63	.47	.34
49	.65	.49	.34
50	.58	.48	.33
51	.55	.41	.37
52	.62	.45	.36
53	.33		.75
54	.65	.46	.32
55	.63	.49	.32
56	.69	.45	
57	.71	.39	.30
58	.48	.34	.52
59	.60	.43	
60	.51		
61	.53		
62	.65	.34	

Only factor loadings ≥ .30 are listed.

Principal Components Analysis of Each Subscale

Each of the logically defined subscales was analyzed using the principal components technique. In all three cases, one factor was identified as the primary factor for each subscale. The *Work Related* subscale had two eigenvalues greater than one. The first eigenvalue was 16.73 which explained 66.95% of the total variance and the second eigenvalue was very low, 1.02, which explained only 4.1% of the total variance. The *Interpersonal Relations* subscale had only one eigenvalue greater than one, 9.39, which explained 62.6% of the total variance. The *Social Community Expectations* subscale had a primary factor with an eigenvalue of 14.19 which explained 64.45% of the variance.

Item Analysis of the *Transition Behavior Scale-Second Edition School Version*

The item analysis of the **TBS-2 SV** consisted of two parts: (a) an analysis of the response distribution of the items and (b) the correlation of the items within a subscale and with the total score on the subscale. The first analysis indicates whether variation exists in the responses to the items. If little variation exists, the items cannot differentiate among individuals. The second part of the analysis indicates whether the items are measuring the assigned characteristic and whether the items discriminate between individuals with high and low scores.

Analysis of Response Distributions

All responses to the 62 items on the **TBS-2 SV** were positively skewed. Quantifier 0 contained between .04% and 5.45% of the responses across all the items. Quantifier 1 contained between .04% and 7.13% of the responses. Quantifier 2 contained .61% and 7.39% of the responses. The median value was Quantifier 3 where 3.16% to 18.25% of the responses fell. On Quantifier 4, 15.01% to 40.58% of the responses were contained. Quantifier 5 contained between 36.12% to 78.46% of the responses.

Item/Total Score Correlations

The item/total score correlations for each of the subscales of the **TBS-2 SV** are presented in Table 4. All of the correlations are at or above the .30 level considered acceptable. As Lien (1976) indicated, empirical analysis should not be the sole criterion for item selection since, in some cases, the statistical selection of items can yield an assessment instrument that is unrepresentative and biased. Using Mehrens and Lehman's (1984) suggestion, the value of each item was judged as to whether it represented the characteristic to which it was assigned. If the item discriminated in a positive direction, had item to total score correlation levels in a positive direction, and had acceptable content validity; the item was retained in the scale.

TABLE 4
ITEM/TOTAL SCORE CORRELATIONS

Work Related		Interpersonal Relations		Social/Community Expectations	
1	.83	26	.83	41	.79
2	.83	27	.77	42	.76
3	.83	28	.77	43	.84
4	.81	29	.85	44	.85
5	.84	30	.67	45	.81
6	.84	31	.80	46	.79
7	.76	32	.85	47	.82
8	.80	33	.39	48	.86
9	.71	34	.88	49	.89
10	.78	35	.82	50	.84
11	.83	36	.80	51	.80
12	.86	37	.84	52	.86
13	.85	38	.80	53	.72
14	.75	39	.85	54	.87
15	.81	40	.80	55	.86
16	.84			56	.87
17	.85			57	.86
18	.83			58	.75
19	.81			59	.80
20	.83			60	.59
21	.82			61	.54
22	.86			62	.76
23	.86				
24	.83				
25	.76				

Reliability

The reliability of an assessment instrument refers to the consistency of that instrument to measure the same construct from one time to another. The four types of reliability discussed in this section are test-retest, inter-rater reliability, internal consistency, and internal consistency for subgroups.

Test-Retest Reliability

The test-retest reliability correlations for the *Transition Behavior Scale* (**TBS**) (McCarney, 1989) and the second edition, **TBS-2 SV**, are presented in Tables 5 and 6.

A total of 203 subjects were rated with the *Transition Behavior Scale* (**TBS**) at an interval of 30 days from the first rating. The correlations range from .87 to .92 and document the significant level of test-retest reliability.

Twenty-one subjects, ranging in age from 12 to 14 years old, were rated with the **TBS-2 SV** at an interval of 30 days from the first rating. The correlations range from .85 to .92 and document the significant level of test-retest reliability.

TABLE 5
TRANSITION BEHAVIOR SCALE
TEST-RETEST RELIABILITY

Subscale	Work Related	Interpersonal Relations	Social/Community Expectations	Total
Work Related	.87	—	—	—
Interpersonal Relations	—	.89	—	—
Social/Community Expectations	—	—	.92	—
Total Scale	—	—	—	.89

N = 203
p < .001

TABLE 6

TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION
TEST-RETEST RELIABILITY

Subscale	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Work Related	.92	—	—	—
Interpersonal Relations	—	.87	—	—
Social/Community Expectations	—	—	.88	—
Total Scale	—	—	—	.86

N = 21
p < .001

Inter-Rater Reliability

Inter-rater reliability demonstrates the consistency of results among multiple raters. A pair of educators with equal knowledge of a student rated the same student. A total of 142 pairs of educators rated a total of 311 students with the **TBS**. The correlations presented in Table 7 range from .87 to .92 and document the high degree of inter-rater reliability.

Internal Consistency Reliability

The major goal of an item analysis is to strengthen total instrument reliability. For this purpose, estimates of internal consistency and total test reliabilities were constructed. Internal consistency of the instrument was used for the measure of reliability. Internal consistency estimates reliability from a single rating with the instrument and applies most directly to the homogeneity of the characteristics (subscales) which measure the same trait (Thorndike, 1950), which in this case are behaviors/skills associated with success in employment and independent living.

The coefficient *alpha* formula (Cronbach, 1951) was the method used to assess reliability. The values of the three subscales and the total scale were equal to or exceeded .90. The reliability of the subscales and total scale exceeds the .70 level considered to be adequate. The subscale and total scale mean, median, standard deviation, mean per item, range, reliability, and average inter-item correlation are provided in Table 8. The correlations between the subscales are given in Table 9 and all were found to equal or exceed .88. This indicates a considerable amount of inter-relationship among the behaviors characterized by each of the subscales.

All tests point to the internal consistency and distinctiveness of the *Work Related, Interpersonal Relations,* and *Social Community Expectations* subscales. Each of the scales has face validity and internal consistency. There is a degree of inter-relationships among the subscales; however, this was expected because they are all aspects of success in employment and independent living. Therefore, all three subscales were retained.

TABLE 7

TRANSITION BEHAVIOR SCALE
INTER-RATER RELIABILITY

Subscale	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Work Related	.90	—	—	—
Interpersonal Relations	—	.87	—	—
Social/Community Expectations	—	—	.92	—
Total Scale	—	—	—	.90

N = 311
p < .001

TABLE 8

TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION
INTERNAL CONSISTENCY RELIABILITY

	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Mean	103.10	63.61	94.63	261.33
Median	106	65	100	272
Standard Deviation	19.45	10.86	15.90	44.54
Mean Per Item	4.12	4.24	4.30	4.22
Range	0-125	0-75	0-110	0-310
Reliability (*alpha*)	0.98	0.95	0.97	0.99
Average Inter-item Correlation	0.66	0.60	0.63	0.60

TABLE 9

TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION
SUBSCALE AND TOTAL SCALE CORRELATIONS

	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Work Related	—	.88	.89	.97
Interpersonal Relations	.88	—	.90	.95
Social/Community Expectations	.89	.90	—	.97
Total Scale	.97	.95	.97	—

TABLE 10

TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION
SUBSCALE AND TOTAL SCALE COEFFICIENT *alpha* FOR SUBGROUPS

Groups	N	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
White	2,037	0.98	0.95	0.97	0.99
African American	313	0.98	0.97	0.98	0.99
Hispanic Origin	163	0.98	0.93	0.97	0.99
Asian or Pacific Islander	43	0.98	0.97	0.98	0.99
American Indian, Eskimo, Aleut	37	0.98	0.93	0.96	0.99
Male	1,328	0.98	0.95	0.97	0.99
Female	1,296	0.98	0.95	0.97	0.99
Total Standardization Sample	2,624	0.98	0.95	0.97	0.99

Internal Consistency for Subgroups

Alpha coefficients were computed for eight subgroups: White; African American; Hispanic Origin; Asian or Pacific Islander; American Indian, Eskimo, Aleut; male; female; and total standardization sample. This data is presented in Table 10. The subgroups selected represent a diverse sample relative to gender and ethnicity. The *alpha* levels demonstrate a high level of reliability across subgroups for the **TBS-2 SV**. This provides evidence of either low level or non-existent bias for each of these subgroups for the **TBS-2 SV**.

Validity

Validity is the degree to which an assessment instrument measures what it was purportedly developed to measure (Beggs & Lewis, 1975). The **TBS-2 SV** was designed to provide a measure of predicted success in employment and independent living. The three types of validity discussed in this section are content validity, criterion-related validity, and construct validity.

Content Validity

Content validity is the extent to which an assessment instrument appears to measure what it purports to measure (Nunnally, 1970). According to Salvia & Ysseldyke (1981), the three facets of content validity to consider are "the appropriateness of the types of items included, the completeness of the item sample, and the ways in which the items assess the content" (p.102). To assure the integrity of the content validity, the author initially created an item pool based upon a careful literature review and input from 42 educational diagnosticians, guidance counselors, educational personnel, and employers. The item development is discussed earlier in this chapter under the *Development of Items* heading. It is important to recognize that the content validity of the **TBS-2 SV** was enhanced with the meticulous review by the educational diagnosticians, guidance counselors, educational personnel, and employers who supplied the information necessary for the creation of the final list of the most relevant behavioral indicators likely to predict success in employment and societal transition.

Criterion-Related Validity

Criterion-related validity is the extent to which an assessment instrument correlates with a validated measure of the same or a similar evaluation instrument. It is necessary that both instruments purport to measure the same construct of behavior, skills, knowledge, etc. To measure criterion-related validity, the **TBS-2 SV** was compared to the *Adaptive Behavior Evaluation Scale-Revised* (ABES-R) (McCarney, 1995), the *Adaptive Behavior Inventory* (ABI) (Leigh, 1986), and the *AAMR Adaptive Behavior Scale-School Second Edition* (AAMR ABS-S:2) (Lambert, Nihira, & Leland, 1993). Correlations were computed for all of the subscales for each scale.

Students were randomly selected for the test of criterion-related validity. Each student was rated using the **TBS-2 SV** and the *ABES-R*. Table 11 represents the correlations between the performance on the **TBS-2 SV** subscales and the *ABES-R* subscales. On the subscales where both instruments measure the same construct, the correlations range from .59 to .83. All correlations are statistically significant ($p<.001$) and demonstrate a strong relationship between the **TBS-2 SV** and the *ABES-R* subscales which measure transition constructs.

Forty students were randomly selected and rated using the **TBS-2 SV** and the *ABI*. Table 12 represents the correlations between the performance on the **TBS-2 SV** subscales and the *ABI* subscales. On the subscales where both instruments measure the same construct, the correlations range from .45 to .83. All correlations are statistically significant ($p<.001$) and demonstrate a strong relationship between the **TBS-2 SV** and the *ABI* subscales which measure transition constructs.

Table 13 represents the correlations between the performance on the **TBS-2 SV** subscales and the *AAMR ABS-S:2*. A total of 40 students were rated with each of these instruments. On the subscales where both instruments measure the same construct, the correlations range from .57 to .77. All correlations are statistically significant ($p<.001$) and demonstrate a strong relationship between the **TBS-2 SV** and the *AAMR ABS-S:2*.

TABLE 11

CORRELATIONS BETWEEN PERFORMANCE ON THE TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION AND THE ADAPTIVE BEHAVIOR EVALUATION SCALE-REVISED

	TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION SUBSCALES			
Adaptive Behavior Evaluation Scale -Revised Subscales	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Communication Skills	.56	.59	.55	.58
Self-Care	.29	.36	.32	.33
Home Living	.62	.65	.64	.66
Social	.88	.91	.89	.92
Community Use	.63	.66	.65	.67
Self-Direction	.90	.85	.85	.90
Health & Safety	.71	.74	.73	.75
Functional Academics	.63	.64	.63	.65
Leisure	.74	.81	.76	.79
Work	.89	.80	.80	.84

N = 2,647
correlations significant at $p<.001$

TABLE 12

CORRELATIONS BETWEEN PERFORMANCE ON THE TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION AND THE ADAPTIVE BEHAVIOR INVENTORY

Adaptive Behavior Inventory Subscales	*TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION* SUBSCALES			
	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Self-Care	.66	.50	.56	.65
Communication Skills	.79	.45	.50	.69
Social Skills	.53	.60	.58	.60
Academic Skills	.83	.52	.56	.74
Occupational Skills	.83	.55	.61	.76
Total Scale	.86	.62	.66	.81

N = 40
correlations significant at p<.001

TABLE 13

CORRELATIONS BETWEEN PERFORMANCE ON THE TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION AND THE AAMR ADAPTIVE BEHAVIOR SCALE-SCHOOL SECOND EDITION

AAMR Adaptive Behavior Scale-School Second Edition Subscales	*TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION* SUBSCALES			
	Work Related	Interpersonal Relations	Social/Community Expectations	Total Scale
Independent Functioning	-.20	.20	.09	-.03
Physical Development	–	–	–	–
Economic Activity	.06ns	.24ns	.15ns	.14ns
Language Development	.52	24ns	.21ns	.40
Numbers and Time	.36	.16ns	.12ns	.26ns
Prevocational/Vocational Activity	.77	.58	.59	.73
Self-Direction	.71	.58	.59	.70
Responsibility	.43	.54	.49	.51
Socialization	.52	.61	.57	.60
Personal Self-Sufficiency	-.26	.16ns	.06ns	-.08ns
Community Self-Sufficiency	.15ns	.30ns	.20ns	.22ns
Personal Social Responsibility	.75	.69	.67	.77

N = 40
correlations significant at p<.001, non significant correlations marked ns

Construct Validity

Construct validity is the degree to which an assessment instrument measures a particular theoretical aspect of the variable being considered (Beggs & Lewis, 1975). Three aspects of construct validity were investigated: factor analysis, subscale inter-relationships, and item validity. All of these aspects were discussed in earlier sections: *Analysis of the Transition Behavior Scale-Second Edition School Version, Development of Items,* and *Internal Consistency Reliability.*

Chapter Three

Administration and Scoring

This section of the manual discusses

- comprehensive assessment procedures,
- administering the **TBS-2 SV**,
- items,
- item ratings,
- quantifiers,
- guidelines and instructions for completing the **TBS-2 SV**, and
- scoring the **TBS-2 SV**.

Comprehensive Assessment Procedures

The **TBS-2 SV** contributes one part to a comprehensive transition planning. Professionals will use their own professional judgement to integrate the results of the **TBS-2 SV** with additional information for transition assessment and planning. Clark (1996) provides the following recommendations for transition assessment and planning:

- Select assessment instruments and procedures on the basis of how to answer key questions in a student's individual transition planning.
- Make transition assessment ongoing.
- Use multiple types and levels of assessment.
- Make three-year psychological re-evaluations for all secondary students useful for their next likely placement or self-selected environment.
- Think of assessment procedures in terms of efficiency, as well as effectiveness.
- Organize assessment data for easy access in IEP planning and instructional programming.
- Someone in the school needs to take primary responsibility for soliciting and coordinating various kinds of assessments and evaluations.
- Develop a transition assessment approach that is not only culture/language fair, but also culture/language enhanced (p. 82).

Clark (1996) reported that the following types of informal assessment techniques can supplement the transition assessment process:

- situational or observational learning style assessments;
- curriculum-based assessment from courses;
- observational reports from teachers, employers, and parents/guardians;
- situational assessments in home, community, and work settings;
- environmental assessment (specific to student's placement options);
- personal-future planning activities/procedures;
- structured interviews with parents/guardians advocates/peers;
- adaptive, behavior, or functional skill inventories/checklists;
- social histories;
- rating scales of employability, independent living, and personal-social skills;
- applied technology/vocational education prerequisite skills assessments; and
- general physical examination (p. 83).

The transition assessment process should gather information about a student's needs, preferences, and interests (Clark, 1996). Parents/guardians/advocates need to provide their view of a student's needs, preferences, and interests (Clark, 1996). It is important to gather both of these views because a student and their parents/guardians/advocates may not share the same opinions. This information can be a vital aspect of transition planning. Students are required by IDEA 97 to be involved in the planning process and participate in the Individualized Transition Plan.

Administering the *Transition Behavior Scale-Second Edition School Version*

Several criteria should be considered in deciding who should be rating students with the **TBS-2 SV**. Rather than identify specific personnel (e.g., teachers, counselors, etc.) who may be in the best position to use the **TBS-2 SV**, it is best to identify the criteria required of anyone to objectively and accurately rate students. Anyone familiar with the student's behavior patterns and specific skills should be considered to rate the student. This person (e.g., teacher, counselor, etc.) may not spend extended periods of time with the student, but may over a period of several months to several years, have a measure of "familiarity" with the student. Familiarity is defined, not as specific time spent with the student, but general knowledge of the student's performance.

Another criterion which may be used to qualify someone to rate a student is the length of time spent with the student. This criterion takes two forms. In the first, the typical self-contained secondary level resource room

teacher who may spend four to five hours per day with a student is in the best possible position to have "extended observational opportunities." Aides who work in such situations also qualify under this criterion. Teachers who may see the student each day for one hour, or three days a week for an hour each day, or once a week for an hour at a time would also qualify. The important consideration here is that these persons observe the student on a regular basis, with a measure of consistency, and over time.

It should also be noted that the ratings of the student's performance should be relative to those behaviors as they occur naturally in the educational environment. Those persons rating a student should do so based on their knowledge of the student's typical performance of the behaviors on the scale. The student should not be given a "performance" test in order to determine if he/she possesses the skills measured by the **TBS-2 SV**.

Items

The items on the **TBS-2 SV** were carefully chosen to provide objective indicators for the purpose of measuring predicted success in employment and societal transition. The 62 items on the scale represent primary predictors of success in employment and societal transition. The items are all objectively stated for the purpose of observation and documentation. The items do not require the rater to infer, draw conclusions, or interpret for the purpose of providing a rating of the student's behavior.

Item Ratings

A major consideration in advising personnel who rate students is to make certain that they choose the quantifier that accurately and objectively represents the student's performance of the behavior or skill. What is required in a rating of the behavior is how the student typically performs the behavior (e.g., **IS NOT DEVELOPMENTALLY APPROPRIATE FOR THE STUDENT'S AGE GROUP, DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL, IS DEVELOPING THE BEHAVIOR OR SKILL, DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY, DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME, DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES [CONSISTENTLY]**). The student must be rated conservatively (e.g., with the highest number quantifier which accurately describes the student's performance of the behavior in order for the scale to accurately predict the student's success in employment and societal transition.

There may be a tendency on the part of persons who rate student behavior to give the student the "benefit of the doubt," this results in loss of discriminative power for the instrument.

Quantifiers

The quantifiers were designed to provide a measure of degrees of success based upon student performance of behaviors necessary for success in employment and independent living. It is recommended that the rater read each quantifier then the item before rating the item. Using item 1 as an example, the rater would first read, "Is not developmentally appropriate to attempt new assignments," then "Does not attempt new assignments," "Developing attempting new assignments," "Demonstrates attempting new assignments inconsistently," "Demonstrates attempting new assignments most of the time," and finally "Demonstrates attempting new assignments at all times (consistently)." Reading the items in this manner makes it easier to assign a rating to the item as it relates to the actual performance of the student.

0

IS NOT DEVELOPMENTALLY APPROPRIATE FOR THE STUDENT'S AGE GROUP

This quantifier represents that the behavior or skill would not be developmentally appropriate or expected of the student's age group.

1

DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL

This quantifier represents that the student does not possess the behavior or skill, or does not demonstrate the behavior or skill. It could be that the student has not yet developed the behavior or skill or chooses not to demonstrate the behavior or skill.

2

DEVELOPING THE BEHAVIOR OR SKILL

This quantifier indicates that the student is beginning to develop/demonstrate the behavior or skill. The behavior or skill is not yet developed to the point where the student is successful in that area. This rating is for a behavior or skill which has been observed to be developing, but not yet mastered.

3

DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY

This quantifier indicates that the student has developed the behavior or skill but does not demonstrate the behavior or skill on a regular basis. This quantifier indicates that the student does not or cannot perform the behavior or skill with regularity. The student may perform the behavior or skill successfully in one situation, but not in the next several situations. It is expected that this quantifier will be used to represent that the student is inconsistent in performance and likely to be unsuccessful in performing a behavior or skill as often or more often than he/she is successful.

4

DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME

This quantifier indicates that the student has the ability to demonstrate the behavior or skill and does so at almost every opportunity. In this situation, it is likely that the student performs the behavior or skill successfully except in a few instances.

5

DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES (CONSISTENTLY)

This quantifier indicates that the student functions at the most successful level, being consistently successful in all situations relative to the behavior or skill. It is the concept of being consistently successful which is most important in order for this quantifier to be used.

Guidelines and Instructions for Completing the *Transition Behavior Scale-Second Edition School Version*

- Demographic information should be completed on the *Profile Sheet*, page 4 of the rating form.
- The rater should be familiar with the *Rating Guidelines* on page 1 of the **TBS-2 SV** rating form.
- The student should be rated by educational personnel with primary observational opportunities who work directly with the student in instructional situations.
- While no established length of time is necessary to observe a student, ratings should be conducted by educators familiar with the student's abilities.
- Any number of persons may rate a student. Each person should independently rate the student using a separate rating form.
- The **TBS-2 SV** is not a test which requires a performance demonstration for each item on the scale. The observer should rely on observations of the student's ability to perform the behaviors on the scale as those behaviors occur naturally in the educational environment.
- It is not necessary to complete the rating of a student in one day. Several days may elapse before the observer is able to complete the scale.
- It is recommended that the rater read each quantifier with the item before rating the item. Using item 1 as an example, the rater would first read, "Is not developmentally appropriate to attempt new assignments," then "Does not attempt new assignments," "Developing attempting new assignments," "Demonstrates attempting new assignments inconsistently," "Demonstrates attempting new assignments most of the time," and finally "Demonstrates attempting new assignments at all times (consistently)."
- The **TBS-2 SV** may be used to rate a student at intervals throughout the school year. The scale is particularly helpful in identifying abilities at the time of entry into a program and progress made over time. For this purpose, it is recommended that a student be rated each quarter, or more frequently as appropriate.
- Some items on the scale are somewhat developmental in nature, in some cases students will not have yet developed a particular skill or will not have been taught the skill. The rating for those items should indicate that the student does not yet have the ability to perform those items. Students are only compared to others in their gender and age group who also have not yet developed the same skills or abilities.

Scoring the *Transition Behavior Scale-Second Edition School Version*

- Raw scores for each **TBS-2 SV** subscale are determined by adding the item ratings for the subscale. The sum of the ratings is placed at the end of each subscale where *Raw Score* is indicated and in the *Raw Score* column on the *Profile Sheet*.
- Using the appropriate gender and age group conversion table in Appendix A (Tables A1-A6), a standard score is determined for each subscale raw score. The standard score for each subscale is recorded in the *Standard Score* column on the *Profile Sheet*.
- Using the appropriate gender and age group conversion table in Appendix B (Tables B1-B6), a percentile score is determined for each subscale raw score. The percentile score for each subscale is recorded in the *%ile* column on the *Profile Sheet*.
- The standard scores for the three subscales are added and the sum is recorded on the line identified as *Sum of Subscale SS* on the *Profile Sheet*.
- Using the appropriate gender and age group conversion table in Appendix C (Tables C1-C6), the sum of the subscale standard scores is converted to the quotient score and quotient percentile score and then recorded on the appropriate lines on the *Profile Sheet*.
- Refer to the appropriate gender and age group column in Appendix D for the Standard Error of Measurement (SEM) for each subscale standard score and the quotient score. Record the SEM in the appropriate column on the *Profile Sheet*.
- After the subscale standard and percentile scores, quotient score, and quotient percentile score have been recorded on the *Profile Sheet*, they are plotted on the graph at the bottom of the *Profile Sheet*.

Figures 5-8 represent a completed **TBS-2 SV** rating form. Note that the subscale standard and percentile scores, quotient score, and quotient percentile score are recorded for a female student age 14 years, 2 months.

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SCHOOL VERSION RATING FORM

Stephen B. McCarney

COVER SHEET

RATING GUIDELINES

- The student should be rated by educational personnel with primary observational opportunities who work directly with the student in instructional situations.
- While no established length of time is necessary to observe a student, ratings should be conducted by educators familiar with the student's abilities.
- The rater should rate the behavior as the behavior/skill occurs naturally in the school environment.
- The rater should rate the student using the quantifiers (0-5) provided. Do not leave any items blank.
- It is not necessary for the rater to complete the rating in one day. Several days may elapse before the rating is completed.
- It is recommended that the rater read each quantifer with the item before rating the item. Using item 1 as an example, the rater would first read, "Is not developmentally appropriate to attempt new assignments," then "Does not attempt new assignments," "Developing attempting new assignments," "Demonstrates attempting new assignments inconsistently," "Demonstrates attempting new assignments most of the time," and finally "Demonstrates attempting new assignments at all times (consistently)."
- If the behavior or skill is developmentally beyond what is expected of the student's age group, the rating should be

[0]

IS NOT DEVELOPMENTALLY APPROPRIATE FOR THE STUDENT'S AGE GROUP.

- If the student does not possess the behavior or skill, or does not demonstrate the behavior or skill, the rating should be

[1]

DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL.

- If the student is beginning to develop or demonstrate the behavior or skill but has not yet mastered it, the rating should be

[2]

DEVELOPING THE BEHAVIOR OR SKILL.

- If the student has developed the behavior or skill but does not demonstrate it on a regular basis, the rating should be

[3]

DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY.

- If the student has the ability to demonstrate the behavior or skill and performs it successfully except in a few instances, the rating should be

[4]

DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME.

- If the student consistently demonstrates the behavior or skill successfully in all situations, the rating should be

[5]

DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES (CONSISTENTLY).

IMPORTANT *** PLEASE NOTE: *** IMPORTANT

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Figure 5

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TO RATER: Rate the student using the quantifiers (0-5) provided. Every item must be rated. Do not leave any items blank.

IS NOT DEVELOPMENTALLY APPROPRIATE FOR THE STUDENT'S AGE GROUP	DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL	DEVELOPING THE BEHAVIOR OR SKILL	DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY	DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME	DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES (CONSISTENTLY)
0	1	2	3	4	5

WORK RELATED

5 1. Attempts new assignments

5 2. Begins assignments after receiving directions, instructions, etc.

4 3. Completes assignments within a specified time period

4 4. Completes assignments with at least minimal accuracy

4 5. Completes the required number of assignments in a given period of time

5 6. Is able to be productive in a group situation (e.g., works at a table with several peers, works at a desk with peers nearby, etc.)

4 7. Uses time outside of class appropriately (e.g., performs homework assignments, studies, etc.)

5 8. Responds appropriately to redirection in academic situations (e.g., corrects errors on an assignment)

5 9. Makes appropriate use of free time (e.g., studies, socializes with peers, etc.)

4 10. Follows written directions (e.g., from teachers, principals, etc.)

5 11. Has necessary materials for specified activities

4 12. Remains on task for the required length of time

3 13. Changes from one activity to another without difficulty (e.g., can stop one activity and begin another, puts materials away and gets ready for another activity, etc.)

5 14. Demonstrates short-term memory skills (e.g., follows two- and three-step directions)

4 15. Follows directions without requiring repetition, explanations, etc.

4 16. Makes responsible decisions on his/her own (e.g., uses common sense, logic, etc.)

5 17. Is organized (e.g., uses time wisely, does not waste materials, has good work habits, etc.)

4 18. Is dependable (e.g., is on time, prepared, ready to work, etc.)

4 19. Demonstrates initiative in the absence of directions (e.g., takes appropriate action rather than remaining inactive, uses good judgment, etc.)

5 20. Is independent (e.g., can work on own without supervision, with limited encouragement, etc.)

5 21. Demonstrates problem-solving skills (e.g., is resourceful, finds alternative ways to deal with situations, etc.)

4 22. Is attentive

5 23. Is persistent in seeking success (e.g., will stay with a task or activity until successful)

4 24. Takes responsibility for his/her own actions (e.g., learns from mistakes, recognizes consequences of inappropriate behavior and responds appropriately, etc.)

4 25. Is willing to assume extra responsibilities, tasks, etc.

HC Raw Score

INTERPERSONAL RELATIONS

5 26. Responds appropriately to typical exchanges with peers (being bumped, touched, brushed against, etc.)

5 27. Responds appropriately to friendly teasing (e.g., joking, name calling, sarcastic remarks, etc.)

5 28. Cares for personal appearance (e.g., grooming, clothing, etc.)

4 29. Demonstrates the ability to resolve conflict situations (e.g., discusses, reasons, compromises, etc.)

4 30. Participates in extracurricular activities (e.g., sports, clubs, etc.)

5 31. Interacts appropriately in work activities (e.g., gets involved in discussions, projects, etc.)

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Figure 6

IS NOT DEVELOPMENTALLY APPROPRIATE FOR THE STUDENT'S AGE GROUP	DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL	DEVELOPING THE BEHAVIOR OR SKILL	DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY	DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME	DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES (CONSISTENTLY)
0	1	2	3	4	5

[5] 32. Uses communication skills to maintain positive interpersonal relationships with peers

[5] 33. Demonstrates appropriate hygiene (e.g., wears clean clothing, washes hands, is free from body odor, etc.)

[5] 34. Can be relied upon to work cooperatively with peers (e.g., shares materials, helps a friend, etc.)

[5] 35. Interacts appropriately with a peer(s) in nonacademic situations (e.g., free time, cafeteria, etc.)

[4] 36. Demonstrates appropriate behavior in competitive activities

[4] 37. Uses communication skills to maintain positive interpersonal relationships with authority figures

[3] 38. Adjusts easily to new situations (e.g., works with individuals he/she does not know, adjusts to new surroundings, etc.)

[4] 39. Demonstrates stability (e.g., maintains consistent patterns of acceptable behavior, emotions, etc.)

[4] 40. Demonstrates loyalty to friends and organized groups (e.g., is dependable, participates, takes responsibility, etc.)

47 Raw Score

SOCIAL/COMMUNITY EXPECTATIONS

[5] 41. Is responsible for appropriate care of personal property

[5] 42. Responds appropriately to environmental cues (e.g., bells, signs, etc.)

[4] 43. Stays in an assigned area for the specified time period (e.g., classroom, building, school grounds, etc.)

[4] 44. Follows the rules of the classroom

[5] 45. Demonstrates appropriate behavior in nonacademic settings (e.g., hallways, restrooms, cafeteria, library, etc.)

[5] 46. Demonstrates appropriate behavior in an academic group setting

[5] 47. Behaves appropriately in the absence of supervision (e.g., instructor is detained)

[4] 48. Responds appropriately to redirection in social situations (e.g., when asked to be quiet, when told to move on to class, etc.)

[4] 49. Follows verbal directions (e.g., from teachers, principals, etc.)

[4] 50. Comes to an activity at the specified time

[4] 51. Is in attendance unless legitimate reason is given

[4] 52. Waits appropriately for assistance from a supervisor

[4] 53. Demonstrates appropriate behavior in the presence of a substitute authority figure (e.g., another teacher in the building, substitute bus driver, substitute teacher, etc.)

[5] 54. Demonstrates the ability to follow a routine

[4] 55. Accepts change in an established routine (e.g., change in schedule)

[5] 56. Demonstrates appropriate use of school-related materials (e.g., supplies and equipment)

[5] 57. Demonstrates appropriate care and handling of others' property

[5] 58. Adjusts behavior to expectations of different situations (e.g., free time, assemblies, cafeteria, classroom, etc.)

[5] 59. Is honest (e.g., does not cheat or steal)

[5] 60. Uses supplies or operates equipment and machinery safely

[5] 61. Does not possess or use drugs or alcohol at school

[3] 62. Demonstrates the ability to control temper (e.g., does not resort to verbal or physical aggression when frustrated, angry, etc.)

49 Raw Score

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Figure 7

SCHOOL VERSION RATING FORM

Stephen B. McCarney

PROFILE SHEET

Name: Amanda Andrews Gender: F

School: Midvale High School

Class: Social Studies Grade: 8

City: Midvale State: MI

Date of rating: 1997 (year) 12 (month) 15 (day)

Date of birth: 1982 (year) 11 (month) 15 (day)

Age at rating: 14 (years) 2 (months) 1 (days)

SUMMARY OF SCORES

Subscales	Raw Score	Standard Score (Appendix A)	%ile (Appendix B)	Standard Score SEM (Appendix D)
Work Related	110	11	61	.45
Interpersonal Relations	67	11	49	.79
Social/Community Expectations	99	10	46	.54
Total Scale				

Sum of Subscale SS	Quotient Score (Appendix C)	Quotient %ile (Appendix C)	Quotient Score SEM (Appendix D)
32	103	52	1.77

Standard Score	SUBSCALES: Work Related	Interpersonal Relations	Social/Community Expectations	Quotients	Quotient	Percentiles	Percentile Rank
20	•	•	•	150	•	>99	•
19	•	•	•	145	•	95	•
18	•	•	•	140	•	90	•
17	•	•	•	135	•	85	•
16	•	•	•	130	•	80	•
15	•	•	•	125	•	75	•
14	•	•	•	120	•	70	•
13	•	•	•	115	•	65	•
12	•	•	•	110	•	60	•
11	X	X	•	105	•	55	•
10	•	•	X	100	•	50	•
9	•	•	•	95	•	45	•
8	•	•	•	90	•	40	•
7	•	•	•	85	•	35	•
6	•	•	•	80	•	30	•
5	•	•	•	75	•	25	•
4	•	•	•	70	•	20	•
3	•	•	•	65	•	15	•
2	•	•	•	60	•	10	•
1	•	•	•	55	•	5	•
0	•	•	•	50	•	<1	•

Important: Before using this scale, read the section titled *Rating Guidelines* on page one.

TBS-2 SV
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Figure 8

Chapter Four

Interpreting Results

Any professional who uses the **TBS-2 SV** as part of transition planning should be readily familiar with the uses and interpretations of the **TBS-2 SV**. Specific areas addressed are

- subscales,
- item ratings,
- subscale standard scores,
- quotient score,
- percentile score,
- Standard Error of Measurement,
- **TBS-2 SV** profile,
- goals, objectives, and interventions; and
- monitoring progress.

Subscales

The three subscales of the **TBS-2 SV** were formed as a result of the factor analysis of the 62 items comprising the scale. The designations of the subscales (i.e., *Work Related, Interpersonal Relations,* and *Social Community Expectations*) correspond to the legislative, professional, and federal definitions of transition and provide an educationally-relevant perspective for transition planning.

The **TBS-2 SV** subscales include varying numbers of items which cluster around the behavioral characteristics of transition indicated by the subscales. The differences in the number of items in a subscale do not affect the assessment of transition behavior. It is the standard score and not the raw score which is used as a measure of transition behavior for each subscale. It is the sum of the subscale standard scores that is used to determine the quotient score and the quotient percentile score.

The following is a description of what each subscale measures:

The *Work Related* subscale provides a measure of responsibility, productivity, compliance, organization, persistence, flexibility, and dependability.

The *Interpersonal Relations* subscale provides a measure of cooperation, communication, being a team member, stability, loyalty, and adjustability.

The *Social Community Expectations* subscale provides a measure of responsibility, compliance, dependability, flexibility, honesty, and self-control.

All three subscales, individually and together, provide a measure of behavioral characteristics most likely to predict success in employment and societal transition.

Item Ratings

Individual item ratings are one of the most valuable sources of specific information that may be gained from the **TBS-2 SV**. The student's individual item ratings can indicate specific areas of need which should be identified and discussed separately during transition planning. Low ratings on items indicate the need for intervention in order for the student to be successful in his/her environment. Most simply, the lower the rating of any item, the greater the need for improving that behavior.

An excellent use of item ratings is the practice of prioritizing the items from low to high ratings. This procedure involves listing all items with ratings of zero, then items with ratings of one, etc. and last items with ratings of five. When this procedure is followed, valuable observation information becomes clearly identified priority rankings of areas of weakness that need improvement. The items can then be used as objectives when developing a student's program for transition.

Subscale Standard Scores

The subscale standard scores provide a measure of the factor clusters (i.e., subscales) of behavioral characteristics most likely to predict success in employment and societal transition from the **TBS-2 SV**. The subscale standard scores represent a mean of 10 and a standard deviation of 3. Standard scores of 7 through 13 are considered statistically average (i.e., at or within one standard deviation above or below the mean) and indicate that the student demonstrates performance within the same range as most of the students in the standardization sample. Standard scores below 7 or above 13 are more than one standard deviation from the mean and are considered statistically atypical. Standard scores below 7 (i.e., lightly shaded area of the profile) indicate a cluster of behaviors which are statistically more than one standard deviation below the students in the standardization sample. A standard score of 4 or below (i.e., dark shaded area of the profile) indicates a standard deviation of two or more from the mean and indicates a serious level of concern. Subscale standard scores which are more than one standard deviation below the mean constitute a serious weakness or deficit in those behavioral characteristics necessary for success in employment and societal transition. In order to

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score more than one standard deviation below the mean, the student must have deficits which exceed the majority of an extremely heterogeneous standardization population who represented a racially, ethnically, intellectually, and socio-economically divergent group of students.

If a student scores more than one standard deviation below the mean on any **TBS-2 SV** subscale, the student will likely experience significant difficulty in employment and independent living and will not be successful without a specialized support system. The fact that a student has a statistically significant deficit on one subscale indicates the need for attention to the problem area identified by that subscale. The indication is clearly evident in such a case that without a support program the student will likely experience difficulty in employment and independent living.

Quotient Score

The quotient score is a global measure of a student's overall performance and provides a general indication of the student's ability to be successful in employment and societal transition as compared to the standardization sample. The quotient score is a standard score with a mean of 100 and a standard deviation of 15. Quotient scores from 85 to 115 are considered statistically within the normal range of student performance (i.e., at or within one standard deviation above or below the mean). Scores below 85 are more than one standard deviation below the statistically normal expectation. Scores above 115 are more than one standard deviation above the statistically normal expectation.

As a general rule, students who score more than one standard deviation below the mean on the **TBS-2 SV** (i.e., a quotient score below 85) are in need of an intervention program in order for them to be successful. It should be clearly understood that a quotient score of 80, 75, 70, etc. should not be interpreted as a "borderline" score, but rather as a significant indication of an inability to succeed in employment and societal transition and definitely constitutes special attention.

Percentile Score

The percentile score is an additional global measure of performance and provides a reference for comparing the student's performance to the performance of the students in the standardization sample. It indicates the percentage of students in the standardization sample whose score occurred at or below a particular sum of subscale standard scores. For example, if a student scored at the 15th percentile, this means that the student's performance ranked lower than 85 percent of the students in the standardization sample.

Standard Error of Measurement

The standard error of measurement (SEM) (Nunnally, 1970) was determined as an additional aspect of the **TBS-2 SV** item analysis. The SEM represents the confidence level around the **TBS-2 SV** standard score for each subscale and the total scale quotient score. It is impossible to know the exact true score of an individual. The true score must be estimated from the obtained score and the standard error of measurement of the assessment instrument (Stanley & Hopkins, 1972). Appendix D contains the SEMs for the **TBS-2 SV** subscale standard scores and the quotient score by age and gender group. The numbers represent the confidence level around the standard score for each subscale and the quotient score. There is a 68 percent chance that a subject's true score lies within one SEM on either side of his/her standard score, a 90 percent chance that it lies within 1.28 SEMs, a 95 percent chance that it lies within two SEMs, and a 99 percent chance that it lies within three SEMs. For example, consider a 16-year-old boy with a *Work Related* standard score of 7. There is a 68 percent chance that his true score lies in a range between 6.2 and 7.80. There is a 95 percent chance that his true score lies in a range between 5.4 and 8.6.

Transition Behavior Scale-Second Edition School Version Profile

The **TBS-2 SV** profile (page 4 of the rating form) provides a visual representation of a student's performance in comparison to the means established by the standardization sample involved in the development of the **TBS-2 SV**. The profile makes it convenient to identify strengths or major deficit areas (subscales) of a student. The **TBS-2 SV** profile is a convenient way to share information with parents, educators, and other professionals when communicating about student needs in transition planning.

Identifying Goals, Objectives, and Interventions

The subscales and items from the **TBS-2 SV** can be used to develop goals and objectives for transition planning. Individual items on the scale make excellent behavioral objectives which only need evaluation criteria in order to be used for an IEP. As an example, item number 54, "Demonstrates the ability to follow a routine," can be worded as a behavioral objective: "The student will demonstrate the ability to follow a routine at all times." In a similar manner, when several items on the **TBS-2 SV** indicate an area of concern for one of the subscales, a goal statement can be developed from

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the commonality shared by the items. For example, the student may receive low ratings on items 41, 44, 45, 50, and 54 which are, respectively, "Is responsible for appropriate care of personal property," "Follows the rules of the classroom," "Demonstrates appropriate behavior in nonacademic settings (e.g., hallways, restrooms, cafeteria, library, etc.)," "Comes to an activity at the specified time," and "Demonstrates the ability to follow a routine" and from these areas of need (each would become a behavioral objective), a goal statement for the *Social Community Expectations* subscale could be developed: "The student will demonstrate improvement in social and community expectations."

The *Transition Behavior Scale IEP and Intervention Manual* (McCarney, 1995) was developed to provide goals, objectives, and interventions for the IEP. The goals and objectives are based on the subscales and items of the **TBS-2 SV** while the interventions were designed for each specific item identified on the scale.

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APPENDIX A
CONVERSION OF RAW SCORE TO SUBSCALE STANDARD SCORE

TABLE A1
MALES, AGES 12 THROUGH 15 YEARS

Standard Scores	Work Related	Interpersonal Relations	Social/Community Expectations
20	—	—	—
19	—	—	—
18	—	—	—
17	—	—	—
16	—	—	—
15	—	—	—
14	123-125	75	—
13	117-122	72-74	106-110
12	110-116	68-71	100-105
11	103-109	64-67	95-99
10	96-102	60-63	89-94
9	89-95	57-59	83-88
8	82-88	53-56	78-82
7	75-81	49-52	72-77
6	69-74	45-48	67-71
5	62-68	41-44	61-66
4	55-61	38-40	56-60
3	48-54	34-37	50-55
2	41-47	30-33	45-49
1	0-40	0-29	0-44

TABLE A2
MALES, AGES 16 THROUGH 18 YEARS

Standard Scores	Work Related	Interpersonal Relations	Social/Community Expectations
20	—	—	—
19	—	—	—
18	—	—	—
17	—	—	—
16	—	—	—
15	—	—	—
14	125	—	—
13	118-124	73-75	108-110
12	111-117	69-72	102-107
11	104-110	65-68	96-101
10	98-103	61-64	90-95
9	91-97	58-60	84-89
8	84-90	54-57	78-83
7	77-83	50-53	72-77
6	70-76	46-49	66-71
5	64-69	42-45	61-65
4	57-63	38-41	55-60
3	50-56	35-37	49-54
2	43-49	31-34	43-48
1	0-42	0-30	0-42

APPENDIX A
CONVERSION OF RAW SCORE TO SUBSCALE STANDARD SCORE

TABLE A3
FEMALES, AGES 12 THROUGH 13 YEARS

Standard Scores	Work Related	Interpersonal Relations	Social/Community Expectations
20	—	—	—
19	—	—	—
18	—	—	—
17	—	—	—
16	—	—	—
15	—	—	—
14	124-125	75	—
13	118-123	72-74	106-110
12	112-117	68-71	102-105
11	107-111	65-67	97-101
10	101-106	62-64	92-96
9	95-100	58-61	88-91
8	90-94	55-57	83-87
7	84-89	52-54	78-82
6	78-83	48-51	73-77
5	73-77	45-47	69-72
4	67-72	42-44	64-68
3	61-66	38-41	59-63
2	56-60	35-37	55-58
1	0-55	0-34	0-54

TABLE A4
FEMALES, AGE 14 YEARS

Standard Scores	Work Related	Interpersonal Relations	Social/Community Expectations
20	—	—	—
19	—	—	—
18	—	—	—
17	—	—	—
16	—	—	—
15	—	—	—
14	—	—	—
13	122-125	73-75	110
12	116-121	70-72	105-109
11	109-115	66-69	100-104
10	103-108	63-65	95-99
9	97-102	59-62	90-94
8	91-96	56-58	85-89
7	85-90	52-55	80-84
6	79-84	49-51	75-79
5	72-78	45-48	70-74
4	66-71	42-44	65-69
3	60-65	38-41	60-64
2	54-59	35-37	55-59
1	0-53	0-34	0-54

APPENDIX A
CONVERSION OF RAW SCORE TO SUBSCALE STANDARD SCORE

TABLE A5
FEMALES, AGES 15 THROUGH 16 YEARS

Standard Scores	Work Related	Interpersonal Relations	Social/Community Expectations
20	—	—	—
19	—	—	—
18	—	—	—
17	—	—	—
16	—	—	—
15	—	—	—
14	—	—	—
13	124-125	75	—
12	118-123	72-74	107-110
11	112-117	69-71	102-106
10	105-111	65-68	97-101
9	99-104	62-64	93-96
8	93-98	59-61	88-92
7	87-92	55-58	84-87
6	81-86	52-54	79-83
5	75-80	49-51	74-78
4	68-74	45-48	70-73
3	62-67	42-44	65-69
2	56-61	39-41	61-64
1	0-55	0-38	0-60

TABLE A6
FEMALES, AGES 17 THROUGH 18 YEARS

Standard Scores	Work Related	Interpersonal Relations	Social/Community Expectations
20	—	—	—
19	—	—	—
18	—	—	—
17	—	—	—
16	—	—	—
15	—	—	—
14	—	—	—
13	125	—	—
12	120-124	73-75	108-110
11	115-119	70-72	104-107
10	110-114	67-69	100-103
9	105-109	63-66	96-99
8	100-104	61-62	92-95
7	95-99	58-60	88-91
6	90-94	55-57	84-87
5	85-89	52-54	80-83
4	80-84	49-51	76-79
3	75-79	46-48	73-75
2	70-74	43-45	69-72
1	0-69	0-42	0-68

APPENDIX B
CONVERSION OF RAW SCORE TO SUBSCALE PERCENTILE SCORE

TABLE B1
MALES, AGES 12 THROUGH 15 YEARS

Work Related				Interpersonal Relations		Social/Community Expectations			
Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores
125	95	80	18	75	93	110	93	74	15
124	89	79	17	74	84	109	85	73	14
123	87	78	16	73	79	108	82	72	13
122	85	77	15	72	76	107	79	71	13
121	84	76	14	71	73	106	76	70	12
120	82	75	13	70	70	105	73	69	11
119	81	74	12	69	67	104	69	68	11
118	79	73	11	68	64	103	67	67	10
117	77	72	10	67	61	102	65	66	9
116	74	71	10	66	59	101	63	65	9
115	72	70	9	65	57	100	61	64	8
114	70	69	9	64	55	99	59	63	8
113	69	68	8	63	52	98	57	62	7
112	68	67	8	62	49	97	54	61	7
111	66	66	8	61	42	96	53	60	6
110	64	65	8	60	37	95	51	59	6
109	63	64	7	59	33	94	49	58	5
108	62	63	7	58	30	93	48	57	4
107	61	62	6	57	28	92	46	56	4
106	60	61	6	56	26	91	45	55	4
105	58	60	6	55	24	90	44	54	3
104	56	59	5	54	22	89	42	53	3
103	54	58	5	53	20	88	39	52	3
102	52	57	5	52	19	87	36	51	3
101	50	56	4	51	17	86	33	50	2
100	48	55	4	50	16	85	31	49	2
99	46	54	3	49	15	84	28	48	2
98	44	53	3	48	13	83	25	47	2
97	42	52	3	47	12	82	24	46	2
96	40	51	3	46	10	81	23	45	1
95	38	50	2	45	9	80	22	44	1
94	35	49	2	44	8	79	20	43	1
93	32	48	2	43	7	78	20	42	1
92	31	47	1	42	6	77	19	41	1
91	29	46	1	41	6	76	17	40	<1
90	28	45	1	40	5	75	16		
89	28	44	1	39	5				
88	27	43	1	38	4				
87	25	42	1	37	4				
86	24	41	1	36	3				
85	23	40	1	35	3				
84	22	39	1	34	3				
83	21	38	1	33	2				
82	20	37	1	32	2				
81	19	36	<1	31	1				
				30	1				
				29	1				
				28	1				
				27	1				
				26	1				
				25	1				
				24	1				
				23	<1				

APPENDIX B
CONVERSION OF RAW SCORE TO SUBSCALE PERCENTILE SCORE

TABLE B2
MALES, AGES 16 THROUGH 18 YEARS

Work Related				Interpersonal Relations		Social/Community Expectations			
Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores
125	95	76	14	75	93	110	92	65	8
124	90	75	12	74	82	109	82	64	8
123	87	74	11	73	77	108	77	63	7
122	85	73	10	72	72	107	73	62	7
121	82	72	10	71	68	106	68	61	6
120	80	71	9	70	64	105	64	60	6
119	78	70	8	69	59	104	61	59	5
118	76	69	8	68	56	103	59	58	5
117	73	68	7	67	54	102	57	57	5
116	71	67	7	66	52	101	56	56	4
115	70	66	7	65	50	100	54	55	4
114	68	65	6	64	49	99	52	54	3
113	67	64	6	63	47	98	50	53	3
112	65	63	6	62	44	97	49	52	3
111	62	62	6	61	39	96	47	51	3
110	61	61	5	60	33	95	46	50	3
109	60	60	5	59	30	94	45	49	3
108	59	59	5	58	28	93	43	48	3
107	57	58	4	57	26	92	42	47	3
106	55	57	4	56	24	91	41	46	2
105	53	56	4	55	23	90	39	45	2
104	51	55	4	54	21	89	37	44	1
103	50	54	3	53	19	88	33	43	1
102	48	53	3	52	17	87	30	42	1
101	47	52	3	51	15	86	29	41	1
100	41	51	2	50	14	85	28	40	1
99	36	50	2	49	13	84	26	39	1
98	35	49	1	48	12	83	24	38	1
97	33	48	1	47	10	82	22	37	1
96	32	47	1	46	8	81	21	36	1
95	31	46	1	45	8	80	20	35	1
94	30	45	1	44	7	79	18	34	1
93	29	44	1	43	6	78	17	33	1
92	27	43	1	42	6	77	17	32	1
91	26	42	1	41	6	76	16	31	1
90	26	41	1	40	5	75	16	30	1
89	26	40	1	39	5	74	15	29	1
88	25	39	1	38	4	73	15	28	1
87	24	38	1	37	3	72	15	27	1
86	23	37	1	36	3	71	14	26	1
85	22	36	1	35	2	70	13	25	1
84	21	35	1	34	2	69	13	24	1
83	19	34	1	33	2	68	12	23	1
82	19	33	1	32	2	67	11	22	<1
81	18	32	1	31	1	66	9		
80	17	31	1	30	1				
79	17	30	1	29	1				
78	17	29	1	28	1				
77	16	28	<1	27	1				
				26	1				
				25	1				
				24	1				
				23	1				
				22	1				
				21	1				
				20	1				
				19	<1				

APPENDIX B
CONVERSION OF RAW SCORE TO SUBSCALE PERCENTILE SCORE

TABLE B3
FEMALES, AGES 12 THROUGH 13 YEARS

Work Related				Interpersonal Relations		Social/Community Expectations			
Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores
125	95	87	13	75	93	110	92	76	9
124	88	86	12	74	83	109	82	75	9
123	85	85	11	73	78	108	78	74	9
122	84	84	11	72	74	107	75	73	8
121	82	83	11	71	71	106	73	72	7
120	81	82	11	70	69	105	70	71	6
119	79	81	10	69	68	104	66	70	6
118	77	80	10	68	66	103	64	69	6
117	76	79	9	67	63	102	61	68	6
116	74	78	8	66	60	101	59	67	6
115	71	77	8	65	57	100	57	66	5
114	69	76	8	64	55	99	56	65	5
113	68	75	7	63	53	98	54	64	5
112	66	74	7	62	51	97	52	63	4
111	64	73	7	61	41	96	52	62	4
110	61	72	7	60	30	95	50	61	4
109	59	71	6	59	25	94	49	60	4
108	58	70	6	58	23	93	48	59	3
107	57	69	6	57	22	92	47	58	2
106	55	68	5	56	19	91	45	57	2
105	53	67	5	55	17	90	43	56	2
104	52	66	5	54	16	89	39	55	1
103	50	65	4	53	15	88	34	54	1
102	48	64	4	52	13	87	29	53	1
101	45	63	4	51	11	86	27	52	1
100	41	62	3	50	10	85	23	51	1
99	36	61	3	49	9	84	17	50	1
98	32	60	3	48	8	83	13	49	1
97	29	59	3	47	7	82	12	48	1
96	27	58	3	46	6	81	12	47	1
95	25	57	2	45	6	80	11	46	1
94	22	56	2	44	6	79	11	45	1
93	18	55	2	43	5	78	10	44	<1
92	17	54	1	42	4	77	10		
91	16	53	1	41	4				
90	15	52	1	40	3				
89	14	51	1	39	3				
88	13	50	<1	38	2				
				37	2				
				36	1				
				35	1				
				34	1				
				33	1				
				32	1				
				31	1				
				30	<1				

APPENDIX B
CONVERSION OF RAW SCORE TO SUBSCALE PERCENTILE SCORE

TABLE B4
FEMALES, AGE 14 YEARS

Work Related				Interpersonal Relations		Social/Community Expectations			
Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores
125	93	86	15	75	91	110	89	*8	10
124	82	85	15	74	81	109	*6	*4	9
123	77	84	15	73	76	108	*2	*3	9
122	75	83	15	72	73	107	67	*2	9
121	72	82	15	71	69	106	62	*1	8
120	69	81	14	70	64	105	59	*0	8
119	68	80	13	69	60	104	56	69	8
118	67	79	13	68	55	103	53	68	*
117	65	78	12	67	49	102	49	67	*
116	63	77	10	66	45	101	45	66	6
115	60	76	9	65	43	100	42	65	6
114	58	75	*	64	42	99	40	64	5
113	57	74	*	63	40	98	37	63	5
112	56	73	6	62	36	97	34	62	5
111	53	72	6	61	33	96	32	61	5
110	51	71	6	60	29	95	31	60	4
109	49	70	6	59	26	94	30	59	4
108	47	69	5	58	25	93	29	58	3
107	44	68	5	57	24	92	28	57	2
106	41	67	5	56	21	91	26	56	2
105	39	66	4	55	18	90	24	55	2
104	37	65	4	54	16	89	22	54	2
103	35	64	3	53	15	88	21	53	2
102	34	63	3	52	13	87	19	52	2
101	32	62	3	51	12	86	18	51	2
100	29	61	3	50	11	85	17	50	2
99	28	60	3	49	10	84	15	49	2
98	27	59	2	48	9	83	14	48	1
97	25	58	2	47	8	82	12	47	1
96	24	57	2	46	8	81	11	46	1
95	23	56	1	45	*	80	11	45	1
94	21	55	1	44	*	79	11	44	1
93	20	54	1	43	6	78	11	43	1
92	19	53	1	42	6	77	10	42	<1
91	19	52	1	41	6	76	10		
90	18	51	1	40	5				
89	18	50	1	39	4				
88	17	49	<1	38	3				
87	16			37	2				
				36	1				
				35	<1				

APPENDIX B
CONVERSION OF RAW SCORE TO SUBSCALE PERCENTILE SCORE

TABLE B5
FEMALES, AGES 15 THROUGH 16 YEARS

Work Related				Interpersonal Relations		Social/Community Expectations			
Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores
125	89	86	13	75	86	110	85	79	11
124	76	85	13	74	69	109	66	78	11
123	72	84	12	73	62	108	61	77	10
122	69	83	12	72	57	107	57	76	9
121	66	82	11	71	52	106	53	75	8
120	64	81	11	70	47	105	49	74	8
119	61	80	10	69	42	104	45	73	8
118	58	79	10	68	40	103	43	72	*
117	56	78	10	67	39	102	39	71	*
116	53	77	9	66	37	101	36	70	*
115	51	76	8	65	35	100	35	69	6
114	49	75	*	64	33	99	34	68	4
113	47	74	6	63	31	98	32	67	4
112	45	73	6	62	28	97	30	66	3
111	44	72	6	61	25	96	29	65	3
110	43	71	5	60	22	95	27	64	2
109	42	70	4	59	18	94	26	63	2
108	41	69	4	58	17	93	26	62	1
107	39	68	4	57	16	92	26	61	1
106	38	67	4	56	15	91	25	60	1
105	36	66	4	55	14	90	24	59	1
104	35	65	4	54	13	89	22	58	1
103	34	64	3	53	12	88	20	57	1
102	32	63	3	52	11	87	17	56	1
101	30	62	3	51	10	86	16	55	1
100	27	61	3	50	9	85	15	54	1
99	25	60	2	49	9	84	14	53	1
98	23	59	2	48	8	83	14	52	1
97	22	58	2	47	7	82	13	51	1
96	21	57	2	46	5	81	12	50	1
95	20	56	2	45	4	80	12	49	<1
94	19	55	1	44	4				
93	18	54	1	43	3				
92	17	53	1	42	3				
91	16	52	1	41	2				
90	15	51	1	40	2				
89	15	50	1	39	2				
88	14	49	1	38	2				
87	13	48	<1	37	1				
				36	1				
				35	1				
				34	<1				

APPENDIX B
CONVERSION OF RAW SCORE TO SUBSCALE PERCENTILE SCORE

TABLE B6
FEMALES, AGES 17 THROUGH 18 YEARS

Work Related				Interpersonal Relations		Social/Community Expectations			
Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores	Raw Scores	Percentile Scores
128	87	84	8	78	83	110	84	81	6
124	73	83	8	74	62	109	63	80	6
123	68	82	8	73	56	108	56	79	5
122	63	81	5	72	51	107	50	78	5
121	61	80	5	71	45	106	45	77	5
120	59	79	4	70	41	105	44	76	4
119	56	78	4	69	39	104	40	75	4
118	52	77	4	68	38	103	37	74	4
117	49	76	3	67	36	102	35	73	4
116	46	75	3	66	34	101	32	72	3
115	44	74	2	65	33	100	31	71	3
114	43	73	2	64	31	99	30	70	3
113	41	72	1	63	30	98	30	69	3
112	38	71	1	62	28	97	29	68	2
111	37	70	1	61	25	96	28	67	2
110	36	69	1	60	19	95	27	66	2
109	35	68	1	59	15	94	26	65	1
108	34	67	1	58	13	93	24	64	1
107	33	66	1	57	12	92	23	63	1
106	32	65	1	56	11	91	22	62	1
105	31	64	1	55	10	90	21	61	1
104	31	63	1	54	9	89	18	60	1
103	29	62	1	53	8	88	15	59	1
102	28	61	1	52	6	87	12	58	1
101	26	60	1	51	5	86	10	57	1
100	21	59	1	50	5	85	8	56	1
99	17	58	1	49	4	84	7	55	1
98	16	57	1	48	4	83	6	54	1
97	15	56	1	47	3	82	6	53	<1
96	14	55	1	46	3				
95	13	54	1	45	2				
94	11	53	1	44	2				
93	10	52	1	43	1				
92	10	51	1	42	1				
91	9	50	1	41	1				
90	8	49	1	40	1				
89	7	48	1	39	1				
88	7	47	1	38	1				
87	6	46	1	37	1				
86	5	45	1	36	1				
85	5	44	<1	35	1				
				34	<1				

APPENDIX C
CONVERSION OF SUM OF SUBSCALE STANDARD SCORES TO QUOTIENT AND PERCENTILE SCORES

TABLE C1
MALES, 12 THROUGH 15 YEARS

Sum of Subscale Standard Scores	Quotient Scores	Percentile Scores
41	118	>99
40	117	94
39	115	86
38	113	81
37	112	76
36	110	71
35	108	68
34	107	64
33	105	59
32	103	55
31	102	52
30	100	48
29	98	44
28	97	39
27	95	33
26	93	28
25	92	25
24	90	23
23	88	21
22	87	19
21	85	17
20	83	15
19	82	14
18	80	12
17	78	11
16	77	9
15	75	7
14	73	6
13	72	5
12	70	5
11	68	4
10	67	3
9	65	2
8	63	2
7	62	1
6	60	1
5	58	1
4	57	1
3	55	<1

TABLE C2
MALES, 16 THROUGH 18 YEARS

Sum of Subscale Standard Scores	Quotient Scores	Percentile Scores
40	117	>99
39	115	94
38	113	84
37	112	76
36	110	70
35	108	64
34	107	60
33	105	55
32	103	51
31	102	48
30	100	46
29	98	42
28	97	37
27	95	31
26	93	28
25	92	26
24	90	24
23	88	22
22	87	19
21	85	17
20	83	16
19	82	14
18	80	12
17	78	10
16	77	9
15	75	8
14	73	7
13	72	5
12	70	5
11	68	4
10	67	3
9	65	2
8	63	2
7	62	2
6	60	1
5	58	1
4	57	1
3	55	<1

APPENDIX C
CONVERSION OF SUM OF SUBSCALE STANDARD SCORES TO QUOTIENT AND PERCENTILE SCORES

TABLE C3
FEMALES, AGES 12 THROUGH 13 YEARS

Sum of Subscale Standard Scores	Quotient Scores	Percentile Scores
41	118	>99
40	117	93
39	115	83
38	113	79
37	112	75
36	110	71
35	108	68
34	107	66
33	105	64
32	103	59
31	102	54
30	100	51
29	98	48
28	97	44
27	95	39
26	93	31
25	92	23
24	90	18
23	88	15
22	87	14
21	85	13
20	83	12
19	82	11
18	80	10
17	78	9
16	77	8
15	75	7
14	73	6
13	72	6
12	70	5
11	68	4
10	67	4
9	65	4
8	63	3
7	62	2
6	60	1
5	58	1
4	57	<1
3	55	<1

TABLE C4
FEMALES, AGE 14 YEARS

Sum of Subscale Standard Scores	Quotient Scores	Percentile Scores
39	115	>99
38	113	93
37	112	81
36	110	72
35	108	65
34	107	61
33	105	57
32	103	52
31	102	45
30	100	40
29	98	37
28	97	33
27	95	31
26	93	28
25	92	26
24	90	24
23	88	21
22	87	16
21	85	14
20	83	12
19	82	11
18	80	10
17	78	10
16	77	9
15	75	9
14	73	7
13	72	6
12	70	6
11	68	5
10	67	5
9	65	4
8	63	4
7	62	3
6	60	2
5	58	1
4	57	1
3	55	<1

APPENDIX C
CONVERSION OF SUM OF SUBSCALE STANDARD SCORES TO QUOTIENT AND PERCENTILE SCORES

TABLE C5
FEMALES, AGES 15 THROUGH 16 YEARS

Sum of Subscale Standard Scores	Quotient Scores	Percentile Scores
38	113	>99
37	112	88
36	110	73
35	108	64
34	107	56
33	105	50
32	103	45
31	102	41
30	100	37
29	98	34
28	97	32
27	95	30
26	93	28
25	92	26
24	90	24
23	88	20
22	87	18
21	85	17
20	83	15
19	82	14
18	80	13
17	78	12
16	77	10
15	75	10
14	73	9
13	72	7
12	70	6
11	68	5
10	67	4
9	65	3
8	63	2
7	62	2
6	60	1
5	58	1
4	57	1
3	55	<1

TABLE C6
FEMALES, AGES 17 THROUGH 18 YEARS

Sum of Subscale Standard Scores	Quotient Scores	Percentile Scores
37	112	88
36	110	71
35	108	62
34	107	54
33	105	47
32	103	43
31	102	40
30	100	37
29	98	35
28	97	33
27	95	31
26	93	30
25	92	28
24	90	28
23	88	26
22	87	22
21	85	19
20	83	16
19	82	13
18	80	10
17	78	8
16	77	7
15	75	6
14	73	5
13	72	4
12	70	4
11	68	4
10	67	4
9	65	4
8	63	3
7	62	3
6	60	3
5	58	2
4	57	1
3	55	<1

APPENDIX D
STANDARD SCORE STANDARD ERROR OF MEASUREMENT

TRANSITION BEHAVIOR SCALE-SECOND EDITION SCHOOL VERSION

Group (Gender/Age)	Work Related			Interpersonal Relations			Social/Community Expectations			Quotient Score		
	68%	95%	99%	68%	95%	99%	68%	95%	99%	68%	95%	99%
Males 12-15	.44	.88	1.32	.66	1.32	1.98	.54	1.08	1.62	1.64	3.28	4.92
Males 16-18	.42	.84	1.26	.61	1.22	1.83	.43	.86	1.29	1.42	2.84	4.26
Females 12-13	.49	.98	1.47	.63	1.26	1.89	.61	1.22	1.83	1.84	3.68	5.52
Females 14	.45	.90	1.35	.79	1.58	2.37	.54	1.08	1.62	1.77	3.54	5.31
Females 15-16	.42	.84	1.26	.66	1.32	1.98	.52	1.04	1.56	1.57	3.14	4.71
Females 17-18	.44	.88	1.32	.70	1.40	2.10	.58	1.16	1.74	1.71	3.42	5.13

TRANSITION BEHAVIOR IEP AND INTERVENTION MANUAL

by Stephen B. McCarney, Ed.D.

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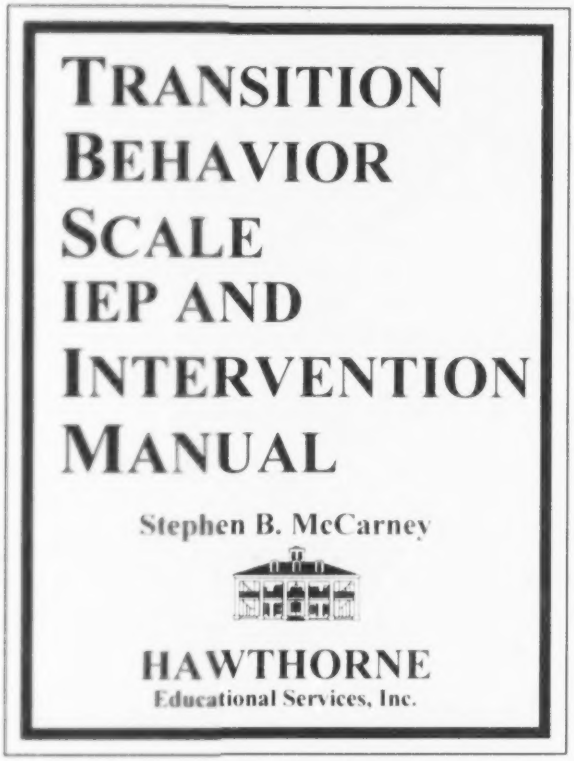

The *Transition Behavior Scale IEP and Intervention Manual* **(230 pages, © 1989)** provides goals, objectives, and interventions for each behavior on the scale, thus making the vital link between transition behavior assessment and intervention. By carefully following assessment results with intervention, the likelihood of student success in employment and independent living is maximized.

Product Number

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TRANSITION BEHAVIOR SCALE SECOND EDITION

SELF-REPORT VERSION

by Stephen B. McCarney, Ed.D. &
Paul D. Anderson, Ph.D.

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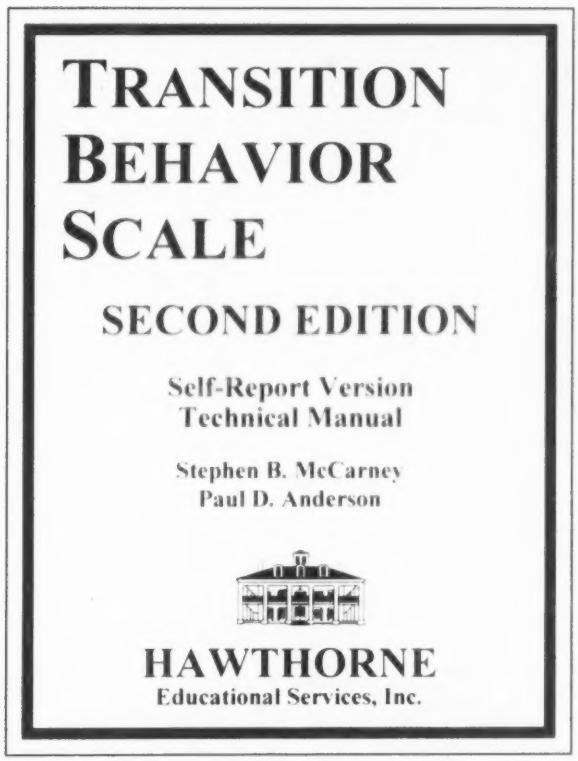

The *Transition Behavior Scale-Second Edition Self-Report Version* **(TBS-2 S-RV)** was developed as a standardized measure of a student's readiness for transition to employment and independent living. The **TBS-2 S-RV** identifies areas of concern for decision-making relative to transition readiness and measures student performance in those areas most likely to predict success in employment and societal adjustment: work related, interpersonal relations, and social/community expectations.

The **TBS-2 S-RV** provides separate norms for male and female students 12 through 18 years of age. The **TBS-2 S-RV** can be completed in approximately 15 minutes and includes 62 items easily observed and documented by the student.

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01230	TBS-2 Self-Report Version Technical Manual	$14.00
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100 ACTIVITIES FOR TRANSITION

by Martha E. Lyle

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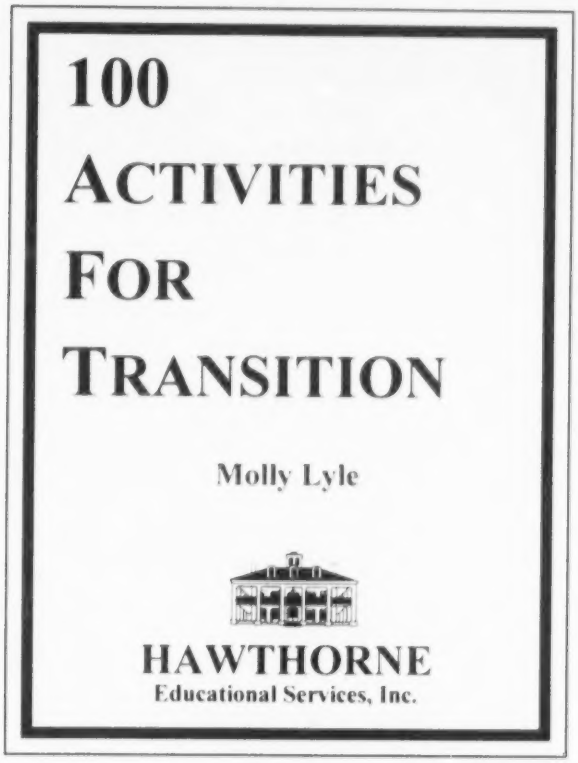

100 Activities for Transition is an easy-to-use resource developed by a teacher for teachers. It provides 100 instructional activities for special educators, transition coordinators, and counselors to use in assisting special needs students transition from secondary education to post-secondary education or employment and independent living. It contains units on *Communication and Problem-Solving, Daily Living, Securing and Keeping a Job, Career Awareness, Self-Determination,* and *Job Shadowing.* The *Job Shadowing* unit is an excellent step-by-step guide to establishing a job shadowing program and evaluating its effectiveness. *100 Activities for Transition* is a valuable resource to use as a springboard for additional transition ideas and activities. Appropriate for students ages 14 through post-secondary. 112 Pages/Paperback.

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